

Amendments to the Claims

1-5. (Canceled).

6.(Original) A vehicle frame assembly, comprising:
a first sub-frame;
a second sub-frame;
a first bearing plate connected to the first sub-frame, the first bearing plate having an opening therethrough and a face;
a second bearing plate connected to the second sub-frame, the second bearing plate having an opening therethrough and a face, the second bearing plate face bearing on the first bearing plate face;
a drive shaft having a longitudinal axis which lies substantially perpendicular to the bearing plate faces, the shaft rotatable in and extending through the bearing plate openings.

7.(Original) The frame assembly according to Claim 6, further comprising a retainer operatively coupled between the shaft and the bearing plates, the retainer configured to retain the shaft in the bearing plate openings while allowing the shaft to rotate about the longitudinal axis.

8.(Original) The frame assembly according to Claim 6, wherein the longitudinal axis is positioned along a mid-line of the sub-frames.

9.(Original) The frame assembly according to Claim 6, further comprising a first yoke disposed at a forward end of the drive shaft and a second yoke disposed at a rearward end of the drive shaft, the first yoke connectable to a front drive line of a vehicle and the second yoke connectable to a rear drive line of the vehicle.

10.(Original) The frame assembly according to Claim 7, wherein the retainer is configured to apply a compressive force between the first bearing plate and the second bearing plate.

11.(Original) The frame assembly according to Claim 9, further comprising a joint connecting one end of the drive shaft to one of the yokes.

12.(Original) The frame assembly according to Claim 11, wherein the joint comprises external splines on the one end of the drive shaft and mating internal splines on one of the yokes.

13.(Original) A vehicle frame assembly, comprising:

a first sub-frame;

a second sub-frame;

a center bearing rotatably coupling the second sub-frame to the first sub-frame at a center portion of the sub-frames; and

a locking mechanism operatively coupled between the first and second sub-frames, the locking mechanism operative between a first position in which the sub-frames are rigidly coupled and a second position in which the sub-frames are free to rotate relative to one another.

14.(Canceled).

15.(Currently Amended) The frame assembly according to Claim 13, wherein ~~each of the center and outboard bearings comprises:~~

a first bearing plate connected to the first sub-frame, the first bearing plate having a face; and

a second bearing plate connected to the second sub-frame, the second bearing plate having a face and the second bearing plate face bearing on the first bearing plate face.

16.(Original) A vehicle frame assembly, comprising:
a first sub-frame;
a second sub-frame;
a first bearing plate connected to the first sub-frame, the first bearing plate having an opening therethrough and a face;
a second bearing plate connected to the second sub-frame, the second bearing plate having an opening therethrough and a face, the second bearing plate face bearing on the first bearing plate face;
a front sleeve extending forward from the first bearing plate along a longitudinal axis which lies substantially perpendicular to the bearing plate faces;
a rear sleeve extending rearward from the second bearing plate along the longitudinal axis;
a tubular bushing extending through the sleeves;
a drive shaft rotatable in and extending through the bushing;
a first yoke disposed at a forward end of the drive shaft, the first yoke connectable to a front drive line of a vehicle; and
a second yoke disposed at a rearward end of the drive shaft, the second yoke connectable to a rear drive line of the vehicle.

17.(Original) The frame assembly according to Claim 16, further comprising a retainer operatively coupled to the shaft and the bushing, the retainer configured to retain the shaft and the bushing in the sleeves.

18-19.(Canceled).

20.(Original) A split-frame vehicle, comprising:
a frame including a first sub-frame rotatably coupled to a second sub-frame;
an engine supported by the frame;
a transmission operatively coupled to the engine;
a first set of wheels connected to one of the sub-frames;
a second set of wheels connected to the other of the sub-frames;
a first drive line connected to the transmission;

a second drive line connected to one of the sets of wheels;
a first bearing plate connected to the first sub-frame, the first bearing plate having an opening therethrough and a face;
a second bearing plate connected to the second sub-frame, the second bearing plate having an opening therethrough and a face, the second bearing plate face bearing on the first bearing plate face; and
a drive shaft having a longitudinal axis which lies substantially perpendicular to the bearing plate faces, the drive shaft coupled between the first and second drive lines and rotatable in and extending through the bearing plate openings.

21.(Original) The vehicle according to Claim 20, further comprising a retainer operatively coupled between the shaft and the bearing plates, the retainer configured to retain the shaft in the bearing plate openings while allowing the shaft to rotate about the longitudinal axis. 22.(Original) The vehicle according to Claim 20, wherein the longitudinal axis is positioned along a mid-line of the sub-frames.

22.(Original) The vehicle according to Claim 20, wherein the longitudinal axis is positioned along a mid-line of the sub-frames.

23.(Original) The vehicle according to Claim 20, further comprising a first yoke disposed at a forward end of the drive shaft and a second yoke disposed at a rearward end of the drive shaft, the first yoke connectable to a front drive line of a vehicle and the second yoke connectable to a rear drive line of the vehicle.

24.(Original) The vehicle according to Claim 21, wherein the retainer is configured to apply a compressive force between the first bearing plate and the second bearing plate.

25-27.(Canceled).

28.(New) The vehicle frame assembly according to Claim 16, further comprising a locking mechanism operatively coupled between the front and rear sub-frames, the locking mechanism operative between a first position in which the sub-frames are rigidly coupled and a second position in which the sub-frames are free to rotate relative one another.

29.(New) The vehicle frame assembly according to Claim 20, further comprising a locking mechanism operatively coupled between the first and second sub-frames, the locking mechanism operative between a first position in which the sub-frames are rigidly coupled and a second position in which the sub-frames are free to rotate relative one another.

30.(New) A vehicle frame assembly, comprising:
a first sub-frame;
a second sub-frame;
a first bearing plate connected to the first sub-frame, the first bearing plate having an opening there through and a face;
a second bearing plate connected to the second sub-frame, the second bearing plate having an opening there through and a face the second bearing plate face bearing on the first bearing plate face;
a drive shaft having a longitudinal axis which lies substantially perpendicular to the bearing plate faces, the shaft rotatable in and extending through the bearing plate openings; and
a locking mechanism operatively coupled between the first and second sub-frames, the locking mechanism operative between a first position in which the sub-frames are rigidly coupled and a second position in which the sub-frames are free to rotate relative to one another.

31.(New) A vehicle frame assembly, comprising:
a first sub-frame;
a second sub-frame;

a center bearing rotatably coupling the second sub-frame to the first sub-frame at a center portion of the sub-frames a drive shaft rotatable in and extending through the center bearing;

a locking mechanism operatively coupled between the first and second sub-frames, the locking mechanism operative between a first position in which the sub-frames are rigidly coupled and a second position in which the sub-frames are free to rotate relative to one another; and

an outboard bearing slideably interposed between the first sub-frame and the second sub-frame at the location of the locking mechanism.

32.(New) The vehicle frame assembly according to Claim 31, wherein:
the locking mechanism comprises first and second locking mechanisms disposed across from one another on opposite sides of the center bearing; and
the outboard bearing comprises a first outboard bearing at the location of the first locking mechanism and a second outboard bearing at the location of the second locking mechanism.

33-34.(Canceled).

35.(New) A more than two-wheel drive split-frame vehicle comprising:
a frame including a front sub-frame and a rear sub-frame;
an engine supported by the front sub-frame;
a transmission operatively coupled to the engine;
a front set of steerable wheels drivingly coupled to the transmission through a front drive train;
a rear set of wheels drivingly coupled to the transmission through a second drive train, the second drive train having a first drive line connected to the transmission and a second drive line connected to the rear set of wheels;
an axial rotator joint rotatably coupling the front sub-frame to the rear sub-frame, the axial rotator joint including a rotatable drive shaft connected between the first and second drive lines; and

a locking mechanism operatively coupled between the front and rear sub-frames, the locking mechanism operative between a first position in which the sub-frames are rigidly coupled and a second position in which the sub-frames are free to rotate relative to one another.

36.(New) A split-frame vehicle, comprising;

a frame including a front sub-frame and a rear sub-frame;

an engine supported by the front sub-frame;

a transmission operatively coupled to the engine;

a front set of steerable wheels connected to the frame;

a rear set of steerable wheels coupled to the frame and drivingly coupled to the transmission through a drive train, the drive train having a first drive line connected to the transmission and a second drive line connected to the rear set of wheels; and

an axial rotator joint rotatably coupling the front sub-frame to the rear sub-frame, the axial rotator joint including a rotatable drive shaft connected between the first and second drive lines.

37.(New) The vehicle according to Claim 36, further comprising a rear steering linkage connected to the rear wheels and wherein steering force is delivered to the rear wheels by hydraulic system comprising:

a hydraulic cylinder connected to the rear steering linkage;

a hydraulic pump connected to the hydraulic cylinder; and

a controller connected to the hydraulic pump.

38.(New) A split-frame vehicle comprising:

a frame including a first sub-frame rotatably coupled to a second sub-frame;

an engine supported by the frame;

a transmission operatively coupled to the engine;

a first set of wheels connected one of the sub-frames;

a second set of wheels connected to the other of the sub-frames;

a center bearing rotatably coupling the second sub-frame to the first sub-frame at a center portion of the sub-frames;

a drive line rotatable in and extending through the center bearing, the drive line operatively coupled between the transmission and at least one of the sets of wheels; and

a locking mechanism operatively coupled between the first and second sub-frames, the locking mechanism operative between a first position in which the sub-frames are rigidly coupled and a second position in which the sub-frames are free to rotate relative to one another.

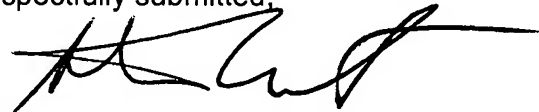
39.(New) The split-frame vehicle according to Claim 38, wherein the center bearing comprises:

a first bearing plate connected to the first sub-frame, the first bearing plate having a face; and

a second bearing plate connected to the second sub-frame, a second bearing plate having a face and a second bearing plate face bearing on the first bearing plate face.

40.(New) The split-frame vehicle according to Claim 38, wherein the locking mechanism comprises and opening in one of the sub-frames and a pin moveably attached to the other one of the sub-frames, the pin moveable an extended position in which the pin extends to rigidly couple the sub-frames and a retracted position in which the pin does not extend and the sub-frames are free to rotate relative to one another.

Respectfully submitted,



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